

Amendments to the Claims:

1. (Currently Amended) A method for verifying ~~reticle enhancement technique latent post-optical proximity corrected mask wafer~~ image sensitivity to ~~mask reticle~~ manufacturing errors, said method comprising: ~~revising a polygon based on mask CD distributions to provide statistically modifying layout polygons based on reticle critical dimension specifications to construct a virtual statistical virtual mask; obtaining response function statistical parameters based on the virtual mask image response function statistical parameters; and comparing the statistical parameters to design rule process tolerance requirements.~~
2. (Currently Amended) A method as recited in claim 1, further comprising forming ~~an a~~ simulated image of the statistical virtual mask.
3. (Currently Amended) A method as recited in claim 2, further comprising calculating response functions based on the ~~acrial and/or latent image simulation~~ simulated image.
4. (Currently Amended) A method as recited in claim 3, further comprising collecting ~~measurements simulated image critical dimensions~~ and calculating statistical parameters based on the response functions.
5. (Currently Amended) A method as recited in claim 4, further comprising comparing the ~~statistical parameters with design rule simulated wafer critical dimension distributions with process tolerance requirements.~~

6. (Currently Amended) A method as recited in claim 1, further comprising obtaining the statistical virtual mask by using mask reticle critical dimension CD-distribution specifications to induce reticle manufacturing statistical variations to layouts which have passed through an OPE optical proximity correction procedure.

7. (Currently Amended) A method as recited in claim 6, further comprising at least one of moving fragments of a polygon and re-sizing primitives of a post-optical proximity correction polygon.

8. (Currently Amended) A method as recited in claim 6, further comprising moving fragments of a post-optical proximity correction polygon based on a randomly generated number from mask CD-distribution a reticle critical dimension specification.

9. (Currently Amended) A method as recited in claim 6, further comprising re-sizing primitives depending on mask CD-distribution a reticle critical dimension specification.

10. (Currently Amended) A yield prediction tool for mask quality specifications, said tool comprising means for revising a polygon based on mask CD-distributions to provide statistically modifying layout polygons based on reticle critical dimension specifications to construct a statistical virtual mask, means for obtaining statistical parameters based on the virtual mask imaging response function statistical parameters; and means for comparing the statistical response parameters to design-rule process tolerance requirements.

11. (Currently Amended) A tool as recited in claim 10, further comprising means for simulating an aerial and/or latent image of the statistical formed virtual mask.
12. (Original) A tool as recited in claim 11, further comprising means for calculating response functions based on the simulated image.
13. (Currently Amended) A tool as recited in claim 12, further comprising means for collecting ~~measurements~~ simulated image critical dimensions and calculating statistical parameters based on the response functions.
14. (Currently Amended) A tool as recited in claim 13, further comprising means for comparing ~~the statistical parameters with design rule~~ simulated wafer critical dimension distributions with process tolerance requirements.
15. (Currently Amended) A tool as recited in claim 10, further comprising means for obtaining the statistical virtual mask by using ~~mask title critical dimension CD distribution specifications~~ to statistically vary layouts which have passed through an ~~OPE~~ optical proximity correction procedure.
16. (Currently Amended) A tool as recited in claim 15, further comprising means for at least one of moving fragments of a polygon and re-sizing primitives of a post-optical proximity correction polygon.

17. (Currently Amended) A tool as recited in claim 15, further comprising means for moving fragments of a post-optical proximity correction polygon based on a randomly generated number from ~~mask CD distribution~~ a reticle critical dimension specification.

18. (Currently Amended) A tool as recited in claim 15, further comprising means for re-sizing primitives depending on ~~mask CD distribution~~ a reticle critical dimension specification.